Section:	Corrections Applications Solutions
Unit:	Parole Automation Biometric Identification Systems
Position Number:	065-623-1583-006
Classification:	Senior Programmer Analyst (Specialist)
Date:	October 2015

<u>Supervision:</u> Under the general direction of the Data Processing Manager II under Applications Maintenance and Support (AMS) within the Corrections Applications Solutions (CAS) section, Parole Automation and Biometric Identification Systems Unit (PABIS), the incumbent has the responsibility for planning, designing and carrying out programs, studies, maintenance and complex information technology (IT) system solutions or other work independently given administrative direction with assignments in terms of broadly defined missions or functions. The incumbent operates within a largely unsupervised environment but within a clear accountability framework and may lead the development, implementation and maintenance of very complex Information Technology (IT) systems and enhancements.

Knowledge: The incumbent, at this level, has a proficient knowledge of data processing concepts, practices, methods and principles for all phases of the software Development Life Cycle using best practices and informed of industry standards based on the Information Technology Infrastructure, strategic plan, business objectives, control agency guidelines and priorities implemented within the Enterprise Information Services (EIS). The incumbent has extensive knowledge of Information Technology programming and analysis. The incumbent is able to apply this knowledge to IT projects and is able to impart this knowledge to other coworkers. The incumbent is proficient in leading the application development and support of three and four tier architectures, Oracle databases, client server applications, Web technology and middleware components. The incumbent has the extensive knowledge and skills to apply tools used within AMS to solve application problems and implement application enhancements. The incumbent is experienced in enterprise system data security, data backup and data recovery.

<u>Guidelines:</u> The incumbent has extensive knowledge of the organization's business and takes into account the larger business perspective in proposing and designing IT solutions. The incumbent provides technical leadership in the development, implementation and maintenance of very complex, mission critical and long-term IT application systems. The incumbent may lead various application development efforts. The Senior PA (Spec.) is responsible for following established procedures, system policies, operations and reference materials for the services provided. These include, but are not limited to: State Administrative Manual, Department Operations Manual, Department and IT Strategic Plans, Enterprise Architecture Standards, and various instructional and user manuals for the hardware, software, and tools used and supported by AMS. The Senior PA (Spec.) must use his/her judgment to determine the scope and depth of guidelines for services under their responsibility.

<u>Complexity:</u> The work requires extensive research and analysis to determine the nature and scope of enhancements, opportunities and problems. The work contributes to the solution of complex problems, architecture reviews, strategic and tactical planning, and change control management as defined by control agencies and the department. The breadth of the Senior PA position includes analyzing, developing, and supporting enterprise-wide application and information systems for departmental business functions.

The incumbent will analyze requests for new Geographic Information Systems (GIS) application programs and modifications to existing GIS programs. Analyzes and documents user work processes and systems functionality requirements; analyzes current GIS system functions, procedures and capabilities to determine if improved methods are possible. Develops and presents proposals for new approaches and options to meet user needs; participates on software selection and implementation teams, including software evaluation, requirements gathering, work flow analysis and system implementation, testing and training.

The Senior PA (Spec.) will assist in performing analysis and programming of enhancements for various applications supporting the Division of Adult Parole Operations, including the Law Enforcement Automated Data System (LEADS). This application spans several servers, including firewalls, application and database servers, and is deployed to Law Enforcement Agencies at the local, state and federal levels. This system is interactive web-based with complex technologies within the Oracle and Endeca environment.

Scope and Effect: The scope of the work involves planning, developing and implementing technological solutions that are essential to the mission of the overall organization and/or affect large numbers of people on a long-term basis. The Senior PA (Spec.) provides services that affect a significant number of California Department of Corrections and Rehabilitation (CDCR) business areas. GIS is used to gather, transform, manipulate, analyze, and produce information related to the department's mission. The LEADS system is deployed to thousands of law enforcement personnel at multiple jurisdictional levels, and provides data essential to officer and public safety. When considering service enhancements or additions, the Senior PA (Spec.) assists in identifying impacts, appropriate methodology and steps to proceed, and alternatives for the customers. The incumbent demonstrates team competency and models the organization's values.

Personal Contact: The incumbent consults with external entities and advises management, administrative or executive staff on the planning, development, implementation and coordination of IT issues. Incumbents communicate effectively, both orally and in writing, with subordinates, peers, clients and customers at all levels. Incumbents demonstrate presentation skills by preparing and conducting presentations and briefings for CDCR management and groups external to the CDCR. There is regular contact with IT staff, management, and external entities to coordinate problem resolution and ensure conformity of methods and practices. The Incumbent contacts users to discuss business and system requirements, contractors to provide contract oversight and contact vendors to discuss existing or new technology. The Senior PA (Spec.) establishes and maintains cooperative relationships with management, Information Technology (IT) personnel, vendors, contractors, and all customer levels while processing service disruptions, service requests, or project related matters, maintaining a customer-friendly and professional attitude during contacts.

<u>Purpose of Contact:</u> The incumbent actively leads meetings, hearings or presentations involving problems or issues of considerable consequence or importance. The incumbent will influence, motivate, persuade, and lead individuals or groups. The Senior PA (Spec.) possesses the ability to provide factual information, and consider and value differing viewpoints, goals or objectives. Those contacted may be hesitant or skeptical, so the incumbent must be skillful in approaching the individual or group in order to obtain the desired response, a satisfactory solution or developing a suitable alternative (i.e. obtain agreement where there is controversy and dissimilar goals).

The actual duties of the incumbent will include the following:

45% Application System Development, Enhancements, and Maintenance

- Resolve the most complex problems in application software, debug programs, determine and develop solutions, code, test, document, and install revised applications.
- Has expert knowledge of preparing system, application program, and customer documentation using the appropriate templates and examples.
- Design, code and test the most complex application systems and integrate new systems with existing systems.
- Perform evaluation and recommend approval/rejection of new systems enhancements and special purpose vendor supplied applications;
- Review and recommend approval of feasibility studies and other related documents.
- Takes responsibility for substantial technical decision making within a largely unsupervised environment but within a clear accountability framework.
- Test new operating environments and migrate existing systems.
- Identify opportunities for process improvement in the current applications and takes the necessary steps to have them evaluated and/or implemented.
- Design new application databases or propose modifications to existing databases.
- Develop and maintain test environments.
- Develop and review project deliverables in each phase of the System Development Life Cycle.
- Lead customer interviews.
- Work with consultants and vendors.
- Facilitate, prepare for, and participate in walkthroughs.
- Perform system development activities as a single member team.

35% | Application System Support

- Expert knowledge of the available tools, methods and procedures to complete assignments.
- Expert knowledge of security concerns, data back-up and recovery procedures.
- Manage the coordination and install of servers, operating systems and special purpose vendor supplied application software, upgrades and/or patches.
- Manage version control of operating system and special purpose vendor supplied application software and licenses;
- Act as a consultant or technical advisor in meetings;
- Act as liaison with vendors to report/troubleshoot special purpose vendor supplied application software problems;
- Lead hardware and software procurements.
- Provide application help desk support to customers.
- Review and approve impact assessment of proposed executive and legislative changes.
- Understand the political and regulatory issues of the organization.
- Understand the business enterprise and the goals and mission of the organization.
- Develop impact assessments of proposed executive and legislative changes.
- Research abnormal data conditions and correct erroneous data caused by program problems.
- Knowledge of database administration issues with regard to performance.
- Research, prepare, and deliver presentations to customers and management.
- Keep abreast of new developments in the industry.
- Understand, follow, and educate others in configuration management.

20% Methodologies, Standards, Training and Other

- Understand, follow, and educate others in CDCR's Project Authority and Enterprise Archtecture Processes.
- Develop templates and examples for system, application program, and customer documentation.
- Participate in formal and informal advanced training programs to strengthen programmer/analyst skills and knowledge of methodologies, techniques, tools, and packages.
- Expected to communicate effectively both orally and in writing with subordinates, peers, clients, customers, and higher level staff.
- Ability to influence, motivate, persuade, and lead an individual or group despite controversy and dissimilar goals, across all levels of the organization.
- Act as a mentor and/or spokesperson in application development and project management best practices.
- Recommend software products that will benefit the organization.
- Create and implement process improvement of policies, methodologies and standards.
- Lead the customization of methodologies and standards to EIS.
- Backup the unit manager and other activities as required.
- Train or mentor staff in complex technical areas.
- Identify opportunities for process improvement of policies, methodologies and standards and take the necessary steps to have them evaluated.
- Know when to ask questions.
- Evaluate commercial software products to determine potential benefit to the organization.
- Participate in Division meetings and other activities as required.
- Manage your own workload.

Employee:	Date:	
Immediate Supervisor:	Date:	